



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,560	09/29/2003	Eric Hatfield	EH-1	2317
7590	12/07/2005		EXAMINER	
John M. Brandt 60 Thaxter St. Hingham, MA 02043			EASHOO, MARK	
			ART UNIT	PAPER NUMBER
			1732	
DATE MAILED: 12/07/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/672,560

Applicant(s)

HATFIELD, ERIC

Examiner

Mark Eashoo, Ph.D.

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7 and 8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Election/Restrictions***

Applicant's election of claims 7-8 in the reply filed on 18-NOV-2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claim grouping, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 18-NOV-2005.

It is noted that the prior Office action had a typo and indicated that group II consisting of claims 7-9. However, there is currently no active claim 9 in the application as indicated on the cover sheet of the prior Office action.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Liberman et al. (US Pat. 4,938,674).

Liberman et al. teaches the claimed process of extruding a tubular bubble, comprising: providing an annular die (Fig. 1); providing a first inner channel (Fig. 1, element 26); providing a second inner channel wherein the first channel is arranged outside the second channel wherein both are inside of the inner wall of the die (Fig. 1, elements 14, 26, and 10); providing cooling air (3:65-4:45 and Fig. 1, element 14); withdrawing heated air through the first channel that was introduced to the bubble as cool air through the second channel (3:65-4:45 and Fig. 1, elements 14 and 26); and wherein a cooling tower is provided forward of the die to distribute and withdraw cooling air (Fig. 1).

To be entitled to patentable weight in method claims, recited structural limitations must affect the method in a manipulative sense and not amount to mere claiming of a use of a particular structure. See *Ex parte Pfeiffer* 135 USPQ 31. In the instant case, the claims recite a limitation wherein a second channel is “within said first channel” in the die and appear to be a mere claiming of a use of a particular structure. Furthermore, even though Liberman et al. does not specifically teach the recited structure, it is submitted that Liberman et al. substantially manipulates the cooling air in the same manner as instantly claimed and therefore anticipates the process steps.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been

Art Unit: 1732

obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liberman et al. (US Pat. 4,938,674) in view of Schirmer (US Pat. 3,539,666). *This is an alternative rejection wherein the structural limitations of the first and second channels is considered to affect the method in a manipulative sense.*

Liberman et al. teaches the basic claimed process of extruding a tubular bubble, comprising: providing an annular die (Fig. 1); providing a first inner channel (Fig. 1, element 26); providing a second inner channel wherein the first channel is arranged outside the second channel wherein both are inside of the inner wall of the die (Fig. 1, elements 14, 26, and 10); providing cooling air (3:65-4:45 and Fig. 1, element 14); withdrawing heated air through the first channel that was introduced to the bubble as cool air through the second channel (3:65-4:45 and Fig. 1, elements 14 and 26); and wherein a cooling tower is provided forward of the die to distribute and withdraw cooling air (Fig. 1).

Liberman et al. does not teach a second channel that is within said first channel while in the die. However, Schirmer teaches a second channel that is within said first channel while in the die (Fig. 1). Liberman et al. and Schirmer are combinable because they are from the same field of endeavor, namely, extruding a bubble and providing interior cooling. At the time of invention a person of ordinary skill in the art would have found it obvious to have used a second channel that is within said first channel while in the die, as taught by Schirmer, in the process of Liberman et al., and would have been motivated to do so since Schirmer suggests that such apparatus structure is an alternative and equivalent means for providing a cooling fluid to a die head that requires a less complex die structure.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached form PTO-892.

### Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Eashoo, Ph.D. whose telephone number is (571) 272-1197. The examiner can normally be reached on 7am-3pm EST, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark Eashoo, Ph.D.  
Primary Examiner  
Art Unit 1732

me  
December 5, 2005

05/Dec/05